



RE: Watershed Questions

Chris Brosch

to:

'Pattison, Kenn', Suzanne Hall

10/21/2010 03:22 PM

Cc:

"Zemba, Andrew", Jeff Sweeney, Lucinda Power, Katherine Antos, "Pat Buckley",
Sucharith Ravi

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From: Chris Brosch <cbrosch@chesapeakebay.net> Sort List...

To: "'Pattison, Kenn'" <kpattison@state.pa.us>, Suzanne Hall/R3/USEPA/US@EPA

Cc: "Zemba, Andrew" <azemba@state.pa.us>, Jeff Sweeney
<JSweeney@chesapeakebay.net>, Lucinda Power/DC/USEPA/US@EPA, Katherine
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All,

http://archive.chesapeakebay.net/pubs/SB_Documentation_Final_V22_9_16_2010.pdf

The above is a link to the Scenario Builder documentation where the values of N and P content of various manures are listed. The source of these values also documented within.

Please don't hesitate to contact the Scenario Builder team (Jeff Sweeney, Sucharith Ravi and me) for assistance in calculating total nutrient reductions and their manure ton equivalents for proper model credit.

Chris

From: Pattison, Kenn [<mailto:kpattison@state.pa.us>]

Sent: Thursday, October 21, 2010 3:05 PM

To: Suzanne Hall

Cc: Zemba, Andrew; Jeff Sweeney; Chris Brosch; Lucinda Power; Katherine Antos; Pat Buckley

Subject: Watershed Questions

Hi Suzanne,

Some questions have come up while working to provide further quantification of state programs within Pa's WIP. As EPA's representative I thought it best to pass them on to you for resolution. The current issues are:

New technologies being developed through our trading program include enhanced manure digester/manure treatment systems. An extensive sampling and process analysis has been completed for two of these new technologies. Actual manure analyses of samples representative of

manure input loads to the proposed systems indicate significantly higher nitrogen and phosphorus concentrations in the manure than indicated using standard "book" values for the manures. These technologies have been approved by EPA for use in our next WIP model run. For the technologies to receive proper credit for the nutrient reductions they will generate, the reported manure quantities treated must be adjusted so that the total nutrient reductions credited within the model would match the actual nutrient reductions these technologies will generate. In other words, the total acres of manure treated must be increased within the model to properly represent the actual N and P content of the manures to be treated. This problem is a consequence having a large scale lumped parameter watershed model that calculates loads based on average conditions.

To help resolve this issue, DEP is requesting the average lbs/ton nitrogen and phosphorous factors that are used in the watershed model to estimate the nutrient content of manure for the all the animal sectors. At this time the emphasis is on the various poultry and dairy factors.

A second issue is the reporting of reductions in NOx emissions. During 2008, our legislature passed the Diesel-Powered Motor Vehicle Idling Act 124. This Act placed restrictions on the idling times allowed for heavy trucks, including school and transit buses. A comprehensive study was completed that documented the anticipate NOx reductions that would result as a result of the Act. DEP will shortly be submitting a request for a portion of these reductions to be included in the upcoming WIP model run.

In advance of this submittal, DEP is requesting clarification on how to include these reductions on the scenario builder template. This reductions can be provided either as tons or pounds of NOx reduction and are available on a county basis.

Your timely attention to these issues is most appreciated. Our hope is to submit a second WIP scenario near the end of next week. Please contact me if you, or anyone else has any questions.

Thank you,
Kenn

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